



SEQUENCE LISTING

<110> Bullerdiek, Jörn

<120> Preparation for the Prevention and/or Treatment of a Tissue Change of Mesenchymal Origin

<130> BOH6278P0010US

<140> 09/890,684

<141> 2001-08-03

<150> PCT/DE00/00364

<151> 2000-02-04

<160> 47

<170> PatentIn version 3.1

<210> 1

<211> 19

<212> DNA

<213> Artificial

<220>

<221> misc_feature

<223> primer HsgA1

<400> 1

aaggtgtcaa tyatgtttg

19

<210> 2

<211> 14

<212> DNA

<213> Artificial

<220>

<221> misc_feature

<223> primer HsgA2

<400> 2

acggttactt kttt

14

<210> 3

<211> 18

<212> DNA

<213> Artificial

<220>

<221> misc_feature

<223> primer HsgB1

<400> 3

tctattccct acctggat

18

<210> 4

<211> 17

<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> primer HsgB2

<400> 4
actcttaacg gcagtag

17

<210> 5
<211> 32
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> ADE1Bg12S

<400> 5
gaagatcttt atagatggaa tggcgccaac at

32

<210> 6
<211> 31
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> primer ADE1Hi3AS

<400> 6
cccaagctta aaactcttct cgcctggcagt c

31

<210> 7
<211> 17
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> primer HsgC1

<400> 7
acctttgact cttctgt

17

<210> 8
<211> 17
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> primer HsgC2

<400> 8
tccttgtatt tagtatc 17

<210> 9
<211> 18
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> primer HsgD1

<400> 9
ccatcatggt cgactcct 18

<210> 10
<211> 17
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> primer HsgD2

<400> 10
aggtagccgg tgaagcc 17

<210> 11
<211> 18
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> HsgE1

<400> 11
gactcttccg tcagctgg 18

<210> 12
<211> 17
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> primer HsgE2

<400> 12
gctggtaacg gcgctct 17

<210> 13
<211> 17

<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> primer HsgF1

<400> 13
atttctattc cttcgcg

17

<210> 14
<211> 17
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> primer HsgF2

<400> 14
tcaggcttgg tacggcc

17

<210> 15
<211> 430
<212> DNA
<213> Adenovirus

<220>
<221> misc_feature
<223> isolate X765551Ko

<400> 15
ggcacctttt accttaacca cactttcaag aaggtctcca tcatgtttga ctccctcagtc 60
agctggcctg gcaatgacag gctgttgagc ccaaagtgt ttgaaatcaa gcgcactgtg 120
gacggggaag ggtacaatgt ggcccaatgt aacatgacca aagactgggt cctgggttcag 180
atgcttgcca actacaacat tggtaccag ggcttttaca tccctgaggg atacaaggat 240
cgcatgtact cttttttcag aaacttccag cctatgagca ggcaggtggt tgatgagggt 300
aattacactg actacaaagc cgtcacctta ccataccaac acaacaactc tggctttgta 360
gggtatcttg cacctactat gagacaaggg gaaccttacc cagccaatta tccatacccg 420
ctcatcgga 430

<210> 16
<211> 430
<212> DNA
<213> Adenovirus

<220>
<221> misc_feature
<223> isolate M2-3s

```

<400> 16
ggcacctttt accttaacca cactttcaag aaggtctcca tcatgtttga ctctcagtc      60
agctggcctg gcaatgacag gctgttgagc ccaaagagt ttgaaatcaa gcgcactgtg      120
gacggggaag ggtacaatgt ggccaatgt aacatgacca aagactgggt cctgggtcag      180
atgcttgcca actacaacat tggctaccag ggcttttaca tccctgaggg atacaaggat      240
cgcatgtact cctttttcag aaacttccag cctatgagca ggcaggtggg tgatgagggt      300
aattacactg actacaaagc cgtcacctta ccataccaac acaacaactc tggctttgta      360
gggtatcttg cacctactat gagacaaggg gaaccttacc cagccaatta tccatacccg      420
ctcatcgga                                     430

```

```

<210> 17
<211> 430
<212> DNA
<213> Adenovirus

```

```

<220>
<221> misc_feature
<223> isolate M7-1s

```

```

<400> 17
ggcaccttct accttaacca cactttcaag aaggtctcca tcatgtttga ctctcagtc      60
agctggcctg gcaatgacag gctgttgagc ccaaagagt ttgaaatcaa gcgcactgtg      120
gacggggaag gatacaacgt ggcacaatgc aacatgacca aagactgggt cctagttcag      180
atgcttgcca actacaacat tggctaccag ggcttttaca tccctgaggg atacaaggat      240
cgcatgtact cttttttcag aaacttccag cctatgagca ggcaggtggg tgatgagggt      300
aattacactg actacaaagc cgtcacctta ccataccaac acaacaactc tggctttgta      360
gggtaccttg cacctactat gagacaaggg gaaccttacc cagccaatta tccatacccg      420
ctcatcgga                                     430

```

```

<210> 18
<211> 430
<212> DNA
<213> Adenovirus

```

```

<220>
<221> misc_feature
<223> isolate M8-2s

```

```

<400> 18
ggcaccttct accttaacca cactttcaag aaggtctcca tcatgtttga ctctcagtc      60
agctggcctg gcaatgacag gctgttgagc ccaaagagt ttgaaatcaa gcgcactgtg      120
gacggggaag gatacaacgt ggcacaatgc aacatgacca aagactgggt cctagttcag      180

```

atgcttgcca actacaacat tggctaccag ggctttttaca tccctgaggg atacaaggat 240
 cgcattgtact ctttttttcag aaacttccag cctacgagca ggcaggtggt tgatgagggt 300
 aattacactg actacaaagc cgtcacctta ccataccaac acaacaactc tggcttttgta 360
 gggtagcttg cacctactat gagacaaggg gaaccttacc cggccaatta tccatacccg 420
 ctcacgcgaa 430

<210> 19
 <211> 143
 <212> PRT
 <213> Adenovirus: isolate X765551Ko

<400> 19
 Gly Thr Phe Tyr Leu Asn His Thr Phe Lys Lys Val Ser Ile Met Phe
 1 5 10 15
 Asp Ser Ser Val Ser Trp Pro Gly Asn Asp Arg Leu Leu Ser Pro Asn
 20 25 30
 Glu Phe Glu Ile Lys Arg Thr Val Asp Gly Glu Gly Tyr Asn Val Ala
 35 40 45
 Gln Cys Asn Met Thr Lys Asp Trp Phe Leu Val Gln Met Leu Ala Asn
 50 55 60
 Tyr Asn Ile Gly Tyr Gln Gly Phe Tyr Ile Pro Glu Gly Tyr Lys Asp
 65 70 75 80
 Arg Met Tyr Ser Phe Phe Arg Asn Phe Gln Pro Met Ser Arg Gln Val
 85 90 95
 Val Asp Glu Val Asn Tyr Thr Asp Tyr Lys Ala Val Thr Leu Pro Tyr
 100 105 110
 Lys His Asn Asn Ser Gly Phe Val Gly Tyr Leu Ala Pro Thr Met Arg
 115 120 125
 Gln Gly Glu Pro Tyr Pro Ala Asn Tyr Pro Tyr Pro Leu Ile Gly
 130 135 140

<210> 20
 <211> 143
 <212> PRT
 <213> Adenovirus: isolate M2-3s

<400> 20
 Gly Thr Phe Tyr Leu Asn His Thr Phe Lys Lys Val Ser Ile Met Phe
 1 5 10 15
 Asp Ser Ser Val Ser Trp Pro Gly Asn Asp Arg Leu Leu Ser Pro Asn
 20 25 30
 Glu Phe Glu Ile Lys Arg Thr Val Asp Gly Glu Gly Tyr Asn Val Ala
 35 40 45
 Gln Cys Asn Met Thr Lys Asp Trp Phe Leu Val Gln Met Leu Ala Asn
 50 55 60

Tyr Asn Ile Gly Tyr Gln Gly Phe Tyr Ile Pro Glu Gly Tyr Lys Asp
 65 70 75 80
 Arg Met Tyr Ser Phe Phe Arg Asn Phe Gln Pro Met Ser Arg Gln Val
 85 90 95
 Val Asp Glu Val Asn Tyr Thr Asp Tyr Lys Ala Val Thr Leu Pro Tyr
 100 105 110
 Lys His Asn Asn Ser Gly Phe Val Gly Tyr Leu Ala Pro Thr Met Arg
 115 120 125
 Gln Gly Glu Pro Tyr Pro Ala Asn Tyr Pro Tyr Pro Leu Ile Gly
 130 135 140

<210> 21
 <211> 143
 <212> PRT
 <213> Adenovirus: isolate M7-1s

<400> 21
 Gly Thr Phe Tyr Leu Asn His Thr Phe Lys Lys Val Ser Ile Met Phe
 1 5 10 15
 Asp Ser Ser Val Ser Trp Pro Gly Asn Asp Arg Leu Leu Ser Pro Asn
 20 25 30
 Glu Phe Glu Ile Lys Arg Thr Val Asp Gly Glu Gly Tyr Asn Val Ala
 35 40 45
 Gln Cys Asn Met Thr Lys Asp Trp Phe Leu Val Gln Met Leu Ala Asn
 50 55 60
 Tyr Asn Ile Gly Tyr Gln Gly Phe Tyr Ile Pro Glu Gly Tyr Lys Asp
 65 70 75 80
 Arg Met Tyr Ser Phe Phe Arg Asn Phe Gln Pro Met Ser Arg Gln Val
 85 90 95
 Val Asp Glu Val Asn Tyr Thr Asp Tyr Lys Ala Val Thr Leu Pro Tyr
 100 105 110
 Lys His Asn Asn Ser Gly Phe Val Gly Tyr Leu Ala Pro Thr Met Arg
 115 120 125
 Gln Gly Glu Pro Tyr Pro Ala Asn Tyr Pro Tyr Pro Leu Ile Gly
 130 135 140

<210> 22
 <211> 143
 <212> PRT
 <213> Adenovirus: isolate M8-2s

<400> 22
 Gly Thr Phe Tyr Leu Asn His Thr Phe Lys Lys Val Ser Ile Met Phe
 1 5 10 15
 Asp Ser Ser Val Ser Trp Pro Gly Asn Asp Arg Leu Leu Ser Pro Asn
 20 25 30

Glu Phe Glu Ile Lys Arg Thr Val Asp Gly Glu Gly Tyr Asn Val Ala
 35 40 45
 Gln Cys Asn Met Thr Lys Asp Trp Phe Leu Val Gln Met Leu Ala Asn
 50 55 60
 Tyr Asn Ile Gly Tyr Gln Gly Phe Tyr Ile Pro Glu Gly Tyr Lys Asp
 65 70 75 80
 Arg Met Tyr Ser Phe Phe Arg Asn Phe Gln Pro Thr Ser Arg Gln Val
 85 90 95
 Val Asp Glu Val Asn Tyr Thr Asp Tyr Lys Ala Val Thr Leu Pro Tyr
 100 105 110
 Lys His Asn Asn Ser Gly Phe Val Gly Tyr Leu Ala Pro Thr Met Arg
 115 120 125
 Gln Gly Glu Pro Tyr Pro Ala Asn Tyr Pro Tyr Pro Leu Ile Gly
 130 135 140

<210> 23
 <211> 430
 <212> DNA
 <213> Adenovirus

<220>
 <221> misc_feature
 <223> isolate AF065068Ko

<400> 23
 ggccactttttt accttaacca cacttttcaag aaggtctcca tcatgtttga ctccctcagtc 60
 agctggcctg gcaatgacag gctgttggtct ccaaagtgtg ttgaaatcaa gcgcactgtg 120
 gatggggaag gatacaatgt ggcccaatgc aacatgacca aagactgggt cctgggttcag 180
 atgcttgcca actacaacat tggctaccag ggctttttaca tccctgaggg atacaaggat 240
 cgcatgtact cttttttcag aaactttccag cctatgagca ggcaggtggt tgatgaggtt 300
 aattacactg actacaaagc cgtcacctta ccatatcaac acaacaactc tggctttgta 360
 ggataccttg cgcttactat gagacaaggg gaaccttacc cagccaatta tccatacccg 420
 ctcatcgga 430

<210> 24
 <211> 430
 <212> DNA
 <213> Adenovirus

<220>
 <221> misc_feature
 <223> isolate M6-1s

<400> 24
 ggcaccttttt accttaacca cacttttcaag aaggtctcca tcatgtttga ctccctcagtc 60


```

agctggcctg gcaatgacag gctgttgtct ccaaatgagt ttgaaatcaa gcgcactgtg      120
gatggggaag gatacaatgt ggcccaatgc aacatgacca aagactgggt cctgggttcag      180
atgcttgcca actacaacat tggctaccag ggctttttaca tccctgaggg atacaaggat      240
cgcatgtact ccttttttcag aaacttccag cctatgagca ggcaggtggt tgatgaggtt      300
aattacactg actacaaagc cgtcacctta ccatatcaac acaacaactc tggcttttgta      360
ggataccttg cgcctactat gagacaaggg gaaccttacc cagccaatta tccatacccg      420
ctcatcgga                                     430

```

<210> 25

<211> 143

<212> PRT

<213> Adenovirus: isolate AF065068Ko

<400> 25

```

Gly Thr Phe Tyr Leu Asn His Thr Phe Lys Lys Val Ser Ile Met Phe
 1             5             10             15

```

```

Asp Ser Ser Val Ser Trp Pro Gly Asn Asp Arg Leu Leu Ser Pro Asn
          20             25             30

```

```

Glu Phe Glu Ile Lys Arg Thr Val Asp Gly Glu Gly Tyr Asn Val Ala
 35             40             45

```

```

Gln Cys Asn Met Thr Lys Asp Trp Phe Leu Val Gln Met Leu Ala Asn
 50             55             60

```

```

Tyr Asn Ile Gly Tyr Lys Gly Phe Tyr Ile Pro Glu Gly Tyr Lys Asp
 65             70             75             80

```

```

Arg Met Tyr Ser Phe Phe Arg Asn Phe Gln Pro Met Ser Arg Gln Val
          85             90             95

```

```

Val Asp Glu Val Asn Tyr Thr Asp Tyr Lys Ala Val Thr Leu Pro Tyr
 100             105             110

```

```

Lys His Asn Asn Ser Gly Phe Val Gly Tyr Leu Ala Pro Thr Met Arg
 115             120             125

```

```

Gln Gly Glu Pro Tyr Pro Ala Asn Tyr Pro Tyr Pro Leu Ile Gly
 130             135             140

```

<210> 26

<211> 143

<212> PRT

<213> Adenovirus: isolate M6-1s

<400> 26

```

Gly Thr Phe Tyr Leu Asn His Thr Phe Lys Lys Val Ser Ile Met Phe
 1             5             10             15

```

```

Asp Ser Ser Val Ser Trp Pro Gly Asn Asp Arg Leu Leu Ser Pro Asn
          20             25             30

```

```

Glu Phe Glu Ile Lys Arg Thr Val Asp Gly Glu Gly Tyr Asn Val Ala
 35             40             45

```

Gln Cys Asn Met Thr Lys Asp Trp Phe Leu Val Gln Met Leu Ala Asn
50 55 60
Tyr Asn Ile Gly Tyr Lys Gly Phe Tyr Ile Pro Glu Gly Tyr Lys Asp
65 70 75 80
Arg Met Tyr Ser Phe Phe Arg Asn Phe Gln Pro Met Ser Arg Gln Val
85 90 95
Val Asp Glu Val Asn Tyr Thr Asp Tyr Lys Ala Val Thr Leu Pro Tyr
100 105 110
Lys His Asn Asn Ser Gly Phe Val Gly Tyr Leu Ala Pro Thr Met Arg
115 120 125
Gln Gly Glu Pro Tyr Pro Ala Asn Tyr Pro Tyr Pro Leu Ile Gly
130 135 140

<210> 27
<211> 430
<212> DNA
<213> Adenovirus

<220>
<221> misc_feature
<223> isolate AF065065Ko

<400> 27
ggcacctttt accttaacca cacttttcaag aaggtctcca tcatgtttga ctctcagtc 60
agctggcctg gcaatgacag gctgttgagc ccaaatgagt ttgaaatcaa gcgcactgtg 120
gacggggaag ggtacaatgt ggcccaatgt aacatgacca aagactgggt cctggttcag 180
atgcttgcca actacaacat tggctaccag ggcttttaca tccctgaggg atacaaggat 240
cgcatgtact cttttttcag aaacttccag cctatgagca ggcaggtggg tgatgaggtt 300
aattacactg actacaaagc cgtcacctta ccataccaac acaacaactc tggctttgta 360
gggtatcttg cacctactat gagacaaggg gaaccttacc cagccaatta tccatacccg 420
ctcatcgga 430

<210> 28
<211> 430
<212> DNA
<213> Adenovirus

<220>
<221> misc_feature
<223> isolate M3.3P-2

<220>
<221> misc_feature
<222> (147)..(147)
<223> n is any of a,g, c and t

<220> .
 <221> misc_feature
 <222> (148)..(148)
 <223> n is any of a,g, c and t

<220>
 <221> misc_feature
 <222> (222)..(222)
 <223> n is any of a,g, c and t

<220>
 <221> misc_feature
 <222> (299)..(299)
 <223> n is any of a,g, c and t

<400> 28
 ggcacctttt accttaacca cactttcaag aaggtctcca tcatgtttga ctctcagtc 60
 agctggcctg gcaatgacag gctgttgagc ccaaatgagt ttgaaatcaa gcgcactgtg 120
 gacggggaag ggtacaatgt ggcccanngt aacatgacca aagactgggt cctgggttcag 180
 atgcttgcca actacaacat tggctaccag ggcttttaca tncctgaggg atacaaggat 240
 cgcagtact cttttttcag aaacttccag cctatgagca ggcaggtggc tgatgaggnt 300
 aattacactg actacaaagc cggcacctta ccataccaac acaacaactc tggctttgta 360
 gggatatcttg cacctactat gagacaaggg gaaccttacc cagccaatta tccatacccg 420
 ctcacgga 430

<210> 29
 <211> 430
 <212> DNA
 <213> Adenovirus

<220>
 <221> misc_feature
 <223> isolate M5-1s

<400> 29
 ggcacctttt accttaacca cactttcaag aaggtctcca tcatgtttga ctctcagtc 60
 agctggcctg gcaatgacag gctgttgagc ccaaatgagt ttgaaatcaa gcgcactgtg 120
 gacggggaag ggtacaatgt ggcccaatgt aacatgacca aagactgggt cctgggttcag 180
 atgcttgcca actacaacat tggctaccag ggcttttaca tccctgaggg atacaaggat 240
 cgcagtact cttttttcag aaacttccag cctatgagca ggcaggtggg tgatgagggt 300
 aattacactg actacaaagc cgtcacctta ccataccaac acaacaactc tggctttgta 360
 gggatatcttg cacctactat gagacaaggg gaaccttacc cagccaatta tccatacccg 420
 ctcacgga 430

<210> 30
<211> 430
<212> DNA
<213> Adenovirus

<220>
<221> misc_feature
<223> isolate M9-2s

<400> 30
ggcaccttct accttaacca cactttcaag aaggtctcca tcatgtttga ctctcagtc 60
agctggcctg gcaatgacag gctgttgagc ccaaatgagt ttgaaatcaa gcgcactgtg 120
gacggggaag gatacaacgt ggacacaatgc aacatgacca aagactgggt cctagttcag 180
atgcttgcca actacaacat tggctaccag ggcttttaca tccctgaggg atacaaggat 240
cgcatgtact cttttttcag aaacttccag cctatgagca ggaggtgggt tgatgaggtt 300
aattacactg actacaaagc cgtcacotta ccataccaac acaacaactc tggctttgta 360
gggtaccttg cacctactat gagacaaggg gaaccttacc cagccaatta tccatacccg 420
ctcatcgga 430

<210> 31
<211> 143
<212> PRT
<213> Adenovirus: isolate AF065065Ko

<400> 31
Gly Thr Phe Tyr Leu Asn His Thr Phe Lys Lys Val Ser Ile Met Phe
1 5 10 15
Asp Ser Ser Val Ser Trp Pro Gly Asn Asp Arg Leu Leu Ser Pro Asn
20 25 30
Glu Phe Glu Ile Lys Arg Thr Val Asp Gly Glu Gly Tyr Asn Val Ala
35 40 45
Gln Cys Asn Met Thr Lys Asp Trp Phe Leu Val Gln Met Leu Ala Asn
50 55 60
Tyr Asn Ile Gly Tyr Gln Gly Phe Tyr Ile Pro Glu Gly Tyr Lys Asp
65 70 75 80
Arg Met Tyr Ser Phe Phe Arg Asn Phe Gln Pro Met Ser Arg Gln Val
85 90 95
Val Asp Glu Val Asn Tyr Thr Asp Tyr Lys Ala Val Thr Leu Pro Tyr
100 105 110
Gln His Asn Asn Ser Gly Phe Val Gly Tyr Leu Ala Pro Thr Met Arg
115 120 125
Gln Gly Glu Pro Tyr Pro Ala Asn Tyr Pro Tyr Pro Leu Ile Gly
130 135 140

<210> 32
 <211> 143
 <212> PRT
 <213> Adenovirus: isolate M3-3p

<220>
 <221> misc_feature
 <222> (49)..(49)
 <223> Xaa is any amino acid

<220>
 <221> misc_feature
 <222> (50)..(50)
 <223> Xaa is any amino acid

<220>
 <221> misc_feature
 <222> (74)..(74)
 <223> Xaa is any amino acid

<220>
 <221> misc_feature
 <222> (100)..(100)
 <223> Xaa is any amino acid

<400> 32
 Gly Thr Phe Tyr Leu Asn His Thr Phe Lys Lys Val Ser Ile Met Phe
 1 5 10 15
 Asp Ser Ser Val Ser Trp Pro Gly Asn Asp Arg Leu Leu Ser Pro Asn
 20 25 30
 Glu Phe Glu Ile Lys Arg Thr Val Asp Gly Glu Gly Tyr Asn Val Ala
 35 40 45
 Xaa Xaa Asn Met Thr Lys Asp Trp Phe Leu Val Gln Met Leu Ala Asn
 50 55 60
 Tyr Asn Ile Gly Tyr Gln Gly Phe Tyr Xaa Pro Glu Gly Tyr Lys Asp
 65 70 75 80
 Arg Met Tyr Ser Phe Phe Arg Asn Phe Gln Pro Met Ser Arg Gln Val
 85 90 95
 Ala Asp Glu Xaa Asn Tyr Thr Asp Tyr Lys Ala Gly Thr Leu Pro Tyr
 100 105 110
 Gln His Asn Asn Ser Gly Phe Val Gly Tyr Leu Ala Pro Thr Met Arg
 115 120 125
 Gln Gly Glu Pro Tyr Pro Ala Asn Tyr Pro Tyr Pro Leu Ile Gly
 130 135 140

<210> 33
 <211> 143
 <212> PRT

<213> Adenovirus: isolate M5-1s

<400> 33

Gly Thr Phe Tyr Leu Asn His Thr Phe Lys Lys Val Ser Ile Met Phe
1 5 10 15

Asp Ser Ser Val Ser Trp Pro Gly Asn Asp Arg Leu Leu Ser Pro Asn
20 25 30

Glu Phe Glu Ile Lys Arg Thr Val Asp Gly Glu Gly Tyr Asn Val Ala
35 40 45

Gln Cys Asn Met Thr Lys Asp Trp Phe Leu Val Gln Met Leu Ala Asn
50 55 60

Tyr Asn Ile Gly Tyr Gln Gly Phe Tyr Ile Pro Glu Gly Tyr Lys Asp
65 70 75 80

Arg Met Tyr Ser Phe Phe Arg Asn Phe Gln Pro Met Ser Arg Gln Val
85 90 95

Val Asp Glu Val Asn Tyr Thr Asp Tyr Lys Ala Val Thr Leu Pro Tyr
100 105 110

Gln His Asn Asn Ser Gly Phe Val Gly Tyr Leu Ala Pro Thr Met Arg
115 120 125

Gln Gly Glu Pro Tyr Pro Ala Asn Tyr Pro Tyr Pro Leu Ile Gly
130 135 140

<210> 34

<211> 143

<212> PRT

<213> Adenovirus: isolate M9-2s

<400> 34

Gly Thr Phe Tyr Leu Asn His Thr Phe Lys Lys Val Ser Ile Met Phe
1 5 10 15

Asp Ser Ser Val Ser Trp Pro Gly Asn Asp Arg Leu Leu Ser Pro Asn
20 25 30

Glu Phe Glu Ile Lys Arg Thr Val Asp Gly Glu Gly Tyr Asn Val Ala
35 40 45

Gln Cys Asn Met Thr Lys Asp Trp Phe Leu Val Gln Met Leu Ala Asn
50 55 60

Tyr Asn Ile Gly Tyr Gln Gly Phe Tyr Ile Pro Glu Gly Tyr Lys Asp
65 70 75 80

Arg Met Tyr Ser Phe Phe Arg Asn Phe Gln Pro Met Ser Arg Gln Val
85 90 95

Val Asp Glu Val Asn Tyr Thr Asp Tyr Lys Ala Val Thr Leu Pro Tyr
100 105 110

Gln His Asn Asn Ser Gly Phe Val Gly Tyr Leu Ala Pro Thr Met Arg
115 120 125

Gln Gly Glu Pro Tyr Pro Ala Asn Tyr Pro Tyr Pro Leu Ile Gly
130 135 140

<210> 35
<211> 430
<212> DNA
<213> Adenovirus

<220>
<221> misc_feature
<223> isolate M2-3s

<400> 35
ggcacctttt accttaacca cacttttcaag aaggtctcca tcatgtttga ctcttcagtc 60
agctggcctg gcaatgacag gctgttgagc ccaaagtgagt ttgaaatcaa gcgcactgtg 120
gacggggaag ggtacaatgt ggcccaatgt aacatgacca aagactgggtt cctgggttcag 180
atgcttgcca actacaacat tggctaccag ggctttttaca tccctgaggg atacaaggat 240
cgcatgtact cttttttcag aaacttccag cctatgagca ggcaggtggg tgatgagggt 300
aattacactg actacaaagc cgtcacctta ccataccaac acaacaactc tggcttttgta 360
gggtatcttg cacctactat gagacaaggg gaaccttacc cagccaatta tccatacccg 420
ctcatcgga 430

<210> 36
<211> 430
<212> DNA
<213> Adenovirus

<220>
<221> misc_feature
<223> isolate M5-1s

<400> 36
ggcacctttt accttaacca cacttttcaag aaggtctcca tcatgtttga ctcttcagtc 60
agctggcctg gcaatgacag gctgttgagc ccaaagtgagt ttgaaatcaa gcgcactgtg 120
gacggggaag ggtacaatgt ggcccaatgt aacatgacca aagactgggtt cctgggttcag 180
atgcttgcca actacaacat tggctaccag ggctttttaca tccctgaggg atacaaggat 240
cgcatgtact cttttttcag aaacttccag cctatgagca ggcaggtggg tgatgagggt 300
aattacactg actacaaagc cgtcacctta ccataccaac acaacaactc tggcttttgta 360
gggtatcttg cacctactat gagacaaggg gaaccttacc cagccaatta tccatacccg 420
ctcatcgga 430

<210> 37
<211> 430
<212> DNA
<213> Adenovirus

<220>
<221> misc_feature
<223> isolate M6-1s

<400> 37
ggcacctttt accttaacca cacttttcaag aaggtctcca tcatgtttga ctcttcagtc 60
agctggcctg gcaatgacag gctgttggtc ccaaagagtg ttgaaatcaa gcgcactgtg 120
gatggggaag gatacaatgt ggccaatgc aacatgacca aagactgggt cctgggttcag 180
atgcttgcca actacaacat tggctaccag ggctttttaca tccctgaggg atacaaggat 240
cgcatgtact ctttttttcag aaactttccag cctatgagca ggcaggtggg tgatgaggtt 300
aattacactg actacaaagc cgtcacctta ccataatcaac acaacaactc tggctttgta 360
ggataccttg cgctactat gagacaaggg gaaccttacc cagccaatta tccatacccg 420
ctcatcggaa 430

<210> 38
<211> 430
<212> DNA
<213> Adenovirus

<220>
<221> misc_feature
<223> isolate M7-1s

<400> 38
ggcaccttct accttaacca cacttttcaag aaggtctcca tcatgtttga ctcttcagtc 60
agctggcctg gcaatgacag gctgttgagc ccaaagagtg ttgaaatcaa gcgcactgtg 120
gacggggaag gatacaacgt ggcacaatgc aacatgacca aagactgggt cctagtttcag 180
atgcttgcca actacaacat tggctaccag ggctttttaca tccctgaggg atacaaggat 240
cgcatgtact ctttttttcag aaactttccag cctatgagca ggcaggtggg tgatgaggtt 300
aattacactg actacaaagc cgtcacctta ccataccaac acaacaactc tggctttgta 360
gggtaccttg cacctactat gagacaaggg gaaccttacc cagccaatta tccatacccg 420
ctcatcggaa 430

<210> 39
<211> 430
<212> DNA
<213> Adenovirus

<220>
<221> misc_feature
<223> isolate M8-2s

<400> 39
ggcaccttct accttaacca cacttttcaag aaggtctcca tcatgtttga ctcttcagtc 60


```

agctggcctg gcaatgacag gctgttgagc ccaaatgagt ttgaaatcaa gcgcactgtg 120
gacggggaag gatacaacgt ggcacaatgc aacatgacca aagactgggt cctagttcag 180
atgcttgcca actacaacat tggctaccag ggctttttaca tccctgaggg atacaaggat 240
cgcatgtact cttttttcag aaacttccag cctacgagca ggcaggtggg tgatgaggtt 300
aattacactg actacaaagc cgtcacotta ccataccaac acaacaactc tggctttgta 360
gggtaccttg cacctactat gagacaaggg gaaccttacc cggccaatta tccatacccg 420
ctcatcgga 430

```

```

<210> 40
<211> 430
<212> DNA
<213> Adenovirus

```

```

<220>
<221> misc_feature
<223> isolate M9-2s

```

```

<400> 40
ggcaccttct accttaacca cactttcaag aaggtctcca tcatgtttga ctctcagtc 60
agctggcctg gcaatgacag gctgttgagc ccaaatgagt ttgaaatcaa gcgcactgtg 120
gacggggaag gatacaacgt ggcacaatgc aacatgacca aagactgggt cctagttcag 180
atgcttgcca actacaacat tggctaccag ggctttttaca tccctgaggg atacaaggat 240
cgcatgtact cttttttcag aaacttccag cctatgagca ggcaggtggg tgatgaggtt 300
aattacactg actacaaagc cgtcacotta ccataccaac acaacaactc tggctttgta 360
gggtaccttg cacctactat gagacaaggg gaaccttacc cagccaatta tccatacccg 420
ctcatcgga 430

```

```

<210> 41
<211> 143
<212> PRT
<213> Adenovirus: isolate M2-3s

```

```

<400> 41
Gly Thr Phe Tyr Leu Asn His Thr Phe Lys Lys Val Ser Ile Met Phe
 1             5             10             15
Asp Ser Ser Val Ser Trp Pro Gly Asn Asp Arg Leu Leu Ser Pro Asn
      20             25             30
Glu Phe Glu Ile Lys Arg Thr Val Asp Gly Glu Gly Tyr Asn Val Ala
 35             40             45
Gln Cys Asn Met Thr Lys Asp Trp Phe Leu Val Gln Met Leu Ala Asn
 50             55             60
Tyr Asn Ile Gly Tyr Gln Gly Phe Tyr Ile Pro Glu Gly Tyr Lys Asp

```

65					70					75				80	
Arg	Met	Tyr	Ser	Phe	Phe	Arg	Asn	Phe	Gln	Pro	Met	Ser	Arg	Gln	Val
				85					90					95	
Val	Asp	Glu	Val	Asn	Tyr	Thr	Asp	Tyr	Lys	Ala	Val	Thr	Leu	Pro	Tyr
			100					105					110		
Lys	His	Asn	Asn	Ser	Gly	Phe	Val	Gly	Tyr	Leu	Ala	Pro	Thr	Met	Arg
		115					120					125			
Gln	Gly	Glu	Pro	Tyr	Pro	Ala	Asn	Tyr	Pro	Tyr	Pro	Leu	Ile	Gly	
	130					135					140				

<210> 42

<211> 143

<212> PRT

<213> Adenovirus: isolate M5-1s

<400> 42

Gly	Thr	Phe	Tyr	Leu	Asn	His	Thr	Phe	Lys	Lys	Val	Ser	Ile	Met	Phe
1				5					10					15	
Asp	Ser	Ser	Val	Ser	Trp	Pro	Gly	Asn	Asp	Arg	Leu	Leu	Ser	Pro	Asn
			20					25					30		
Glu	Phe	Glu	Ile	Lys	Arg	Thr	Val	Asp	Gly	Glu	Gly	Tyr	Asn	Val	Ala
		35					40					45			
Gln	Cys	Asn	Met	Thr	Lys	Asp	Trp	Phe	Leu	Val	Gln	Met	Leu	Ala	Asn
	50					55					60				
Tyr	Asn	Ile	Gly	Tyr	Gln	Gly	Phe	Tyr	Ile	Pro	Glu	Gly	Tyr	Lys	Asp
65					70					75					80
Arg	Met	Tyr	Ser	Phe	Phe	Arg	Asn	Phe	Gln	Pro	Met	Ser	Arg	Gln	Val
				85					90					95	
Val	Asp	Glu	Val	Asn	Tyr	Thr	Asp	Tyr	Lys	Ala	Val	Thr	Leu	Pro	Tyr
			100					105					110		
Lys	His	Asn	Asn	Ser	Gly	Phe	Val	Gly	Tyr	Leu	Ala	Pro	Thr	Met	Arg
		115					120					125			
Gln	Gly	Glu	Pro	Tyr	Pro	Ala	Asn	Tyr	Pro	Tyr	Pro	Leu	Ile	Gly	
	130					135					140				

<210> 43

<211> 143

<212> PRT

<213> Adenovirus: isolate M6-1s

<400> 43

Gly	Thr	Phe	Tyr	Leu	Asn	His	Thr	Phe	Lys	Lys	Val	Ser	Ile	Met	Phe
1				5					10					15	
Asp	Ser	Ser	Val	Ser	Trp	Pro	Gly	Asn	Asp	Arg	Leu	Leu	Ser	Pro	Asn
			20					25					30		
Glu	Phe	Glu	Ile	Lys	Arg	Thr	Val	Asp	Gly	Glu	Gly	Tyr	Asn	Val	Ala

35	40	45
Gln Cys Asn Met Thr Lys Asp Trp Phe Leu Val Gln Met Leu Ala Asn		
50	55	60
Tyr Asn Ile Gly Tyr Gln Gly Phe Tyr Ile Pro Glu Gly Tyr Lys Asp		
65	70	75
Arg Met Tyr Ser Phe Phe Arg Asn Phe Gln Pro Met Ser Arg Gln Val		
85	90	95
Val Asp Glu Val Asn Tyr Thr Asp Tyr Lys Ala Val Thr Leu Pro Tyr		
100	105	110
Lys His Asn Asn Ser Gly Phe Val Gly Tyr Leu Ala Pro Thr Met Arg		
115	120	125
Gln Gly Glu Pro Tyr Pro Ala Asn Tyr Pro Tyr Pro Leu Ile Gly		
130	135	140

<210> 44
 <211> 143
 <212> PRT
 <213> Adenovirus: isolate M7-1s

<400> 44
Gly Thr Phe Tyr Leu Asn His Thr Phe Lys Lys Val Ser Ile Met Phe
1 5 10 15
Asp Ser Ser Val Ser Trp Pro Gly Asn Asp Arg Leu Leu Ser Pro Asn
20 25 30
Glu Phe Glu Ile Lys Arg Thr Val Asp Gly Glu Gly Tyr Asn Val Ala
35 40 45
Gln Cys Asn Met Thr Lys Asp Trp Phe Leu Val Gln Met Leu Ala Asn
50 55 60
Tyr Asn Ile Gly Tyr Gln Gly Phe Tyr Ile Pro Glu Gly Tyr Lys Asp
65 70 75 80
Arg Met Tyr Ser Phe Phe Arg Asn Phe Gln Pro Met Ser Arg Gln Val
85 90 95
Val Asp Glu Val Asn Tyr Thr Asp Tyr Lys Ala Val Thr Leu Pro Tyr
100 105 110
Lys His Asn Asn Ser Gly Phe Val Gly Tyr Leu Ala Pro Thr Met Arg
115 120 125
Gln Gly Glu Pro Tyr Pro Ala Asn Tyr Pro Tyr Pro Leu Ile Gly
130 135 140

<210> 45
 <211> 143
 <212> PRT
 <213> Adenovirus: isolate M8-2s

<400> 45
Gly Thr Phe Tyr Leu Asn His Thr Phe Lys Lys Val Ser Ile Met Phe
1 5 10 15

Asp Ser Ser Val Ser Trp Pro Gly Asn Asp Arg Leu Leu Ser Pro Asn
 20 25 30
 Glu Phe Glu Ile Lys Arg Thr Val Asp Gly Glu Gly Tyr Asn Val Ala
 35 40 45
 Gln Cys Asn Met Thr Lys Asp Trp Phe Leu Val Gln Met Leu Ala Asn
 50 55 60
 Tyr Asn Ile Gly Tyr Gln Gly Phe Tyr Ile Pro Glu Gly Tyr Lys Asp
 65 70 75 80
 Arg Met Tyr Ser Phe Phe Arg Asn Phe Gln Pro Thr Ser Arg Gln Val
 85 90 95
 Val Asp Glu Val Asn Tyr Thr Asp Tyr Lys Ala Val Thr Leu Pro Tyr
 100 105 110
 Lys His Asn Asn Ser Gly Phe Val Gly Tyr Leu Ala Pro Thr Met Arg
 115 120 125
 Gln Gly Glu Pro Tyr Pro Ala Asn Tyr Pro Tyr Pro Leu Ile Gly
 130 135 140

<210> 46

<211> 143

<212> PRT

<213> Adenovirus: isolate M9-2s

<400> 46

Gly Thr Phe Tyr Leu Asn His Thr Phe Lys Lys Val Ser Ile Met Phe
 1 5 10 15
 Asp Ser Ser Val Ser Trp Pro Gly Asn Asp Arg Leu Leu Ser Pro Asn
 20 25 30
 Glu Phe Glu Ile Lys Arg Thr Val Asp Gly Glu Gly Tyr Asn Val Ala
 35 40 45
 Gln Cys Asn Met Thr Lys Asp Trp Phe Leu Val Gln Met Leu Ala Asn
 50 55 60
 Tyr Asn Ile Gly Tyr Gln Gly Phe Tyr Ile Pro Glu Gly Tyr Lys Asp
 65 70 75 80
 Arg Met Tyr Ser Phe Phe Arg Asn Phe Gln Pro Met Ser Arg Gln Val
 85 90 95
 Val Asp Glu Val Asn Tyr Thr Asp Tyr Lys Ala Val Thr Leu Pro Tyr
 100 105 110
 Lys His Asn Asn Ser Gly Phe Val Gly Tyr Leu Ala Pro Thr Met Arg
 115 120 125
 Gln Gly Glu Pro Tyr Pro Ala Asn Tyr Pro Tyr Pro Leu Ile Gly
 130 135 140

<210> 47

<211> 720

<212> DNA
<213> Adenovirus

<220>

<221> misc_feature

<223> promoter sequence of the adenoviral protein E1A (as shown in fig.
5)

<400> 47

ctctctatat	aatatacctt	atagatggaa	tggtgccaac	atgtaaata	ggtaatttaa	60
aaaagtgcgc	gctgtgtggt	gattggctgt	ggggtgaatg	actaacatgg	gcggggcggc	120
cgtgggaaaa	tgacgtgact	tatgtgggag	gagttatggt	gcaagttatt	gcggtaaata	180
tgacgtaaaa	ggaggtgtgg	tttgaacacg	gaagtagaca	gttttccac	gcttactggt	240
aggatatgag	gtagttttgg	gcggatgcaa	gtgaaaattc	tccattttcg	cgcgaaaact	300
gaatgaggaa	gtgaatttct	gagtcatttc	gcggttatga	cagggtggag	tatttgccga	360
gggccgagta	gactttgacc	gtttacgtgg	aggtttcgat	taccgtgttt	ttcacctaaa	420
tttccgcgta	cggtgtcaaa	gtcctgtggt	tttacgtagg	gttcagctga	tcgctagggt	480
atttaaacct	gacgagttcc	gtcaagaggc	cactcttgag	tgccagcgag	aagagttttc	540
tcctccgcgc	cgcaagtcag	ttctgcgctt	tgaaaatgag	acacctgcgc	ttcctgccac	600
aggagattat	ctccagttag	accgggatcg	aaatactgga	gtttgtggta	aataccctaa	660
tgggagacga	cccggaaccg	ccagtgcagc	cttttgatcc	acctacgctg	cacgatctgt	720